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(54) Title: PROHORMONE CONVERTASE 1 MUTATION ASSOCIATED WITH OBESITY

(57) **Abstract:** The invention provides novel prohormone convertase 1 mutants that have at least partially defective enzymatic activities. These mutant PC1 enzymes are defective in their autocatalytic activities, but appear to have normal ability in processing proGHRH to its mature form. Also provided in the invention are non-human animals that harbor such a mutant PC1 gene. These non-human animals are obese due to the mutant PC1 gene.